

MAC/IECA

STATUS and SUMMARY of THE TMDL PROGRAM

Total Maximum Daily Loads

- Critical program for achieving healthy watersheds and clean water nationwide
 - States report over 40 percent of assessed waters are still too polluted for fishing or swimming even after 28 years of water pollution control efforts
- What is a TMDL?
 - The amount of a pollutant that a waterbody can receive and still meet water quality standards

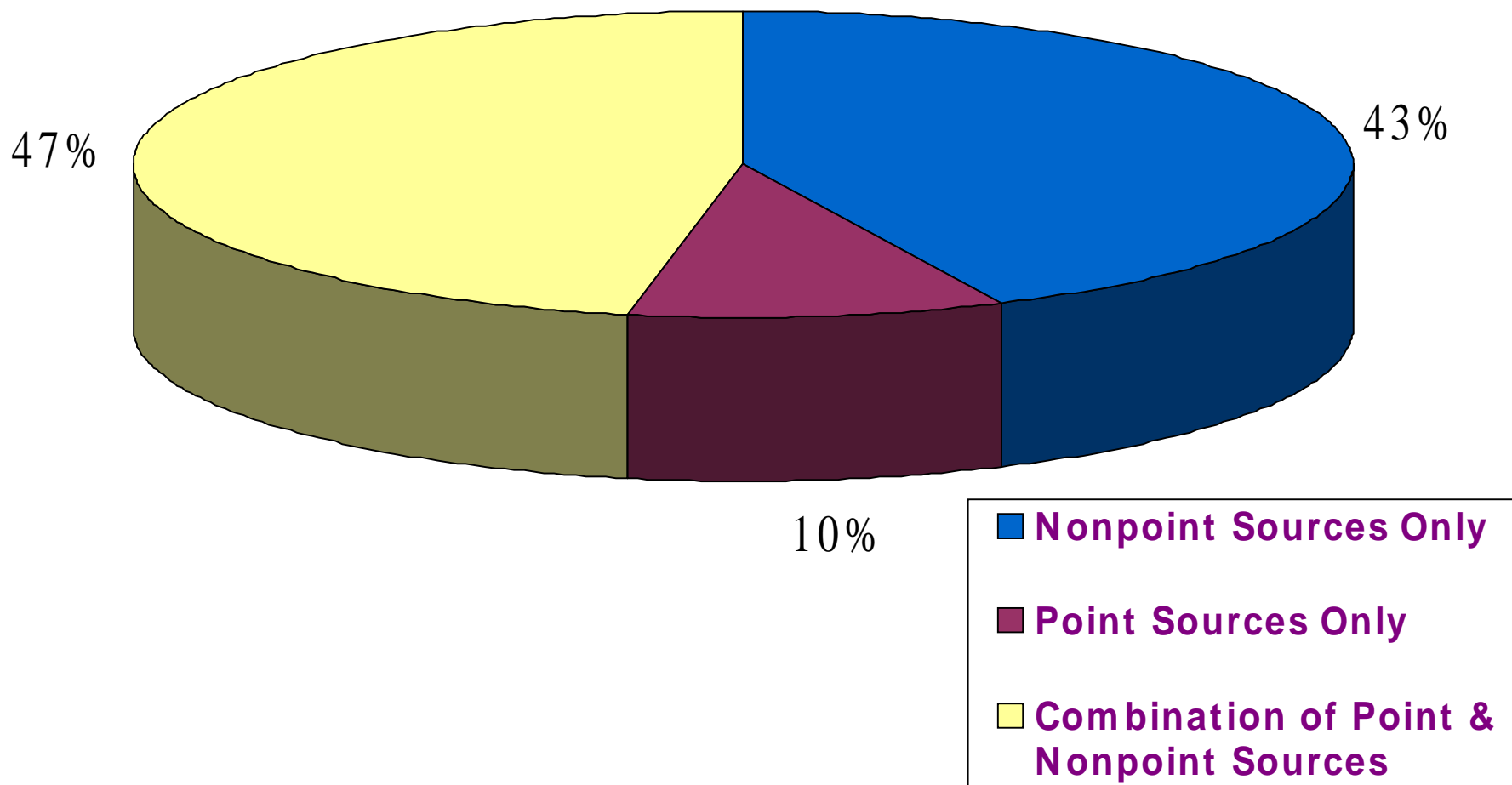
Clean Water Act Requires . . .

- As enacted in 1972, §303(d) of the Clean Water Act requires States to:
 - Identify waters not meeting State water quality standards -- §303(d) list
 - Set priorities for TMDL development
 - Develop a TMDL for each pollutant for each listed water
- EPA to approve or disapprove State submissions, and if disapproved, to act in lieu of State

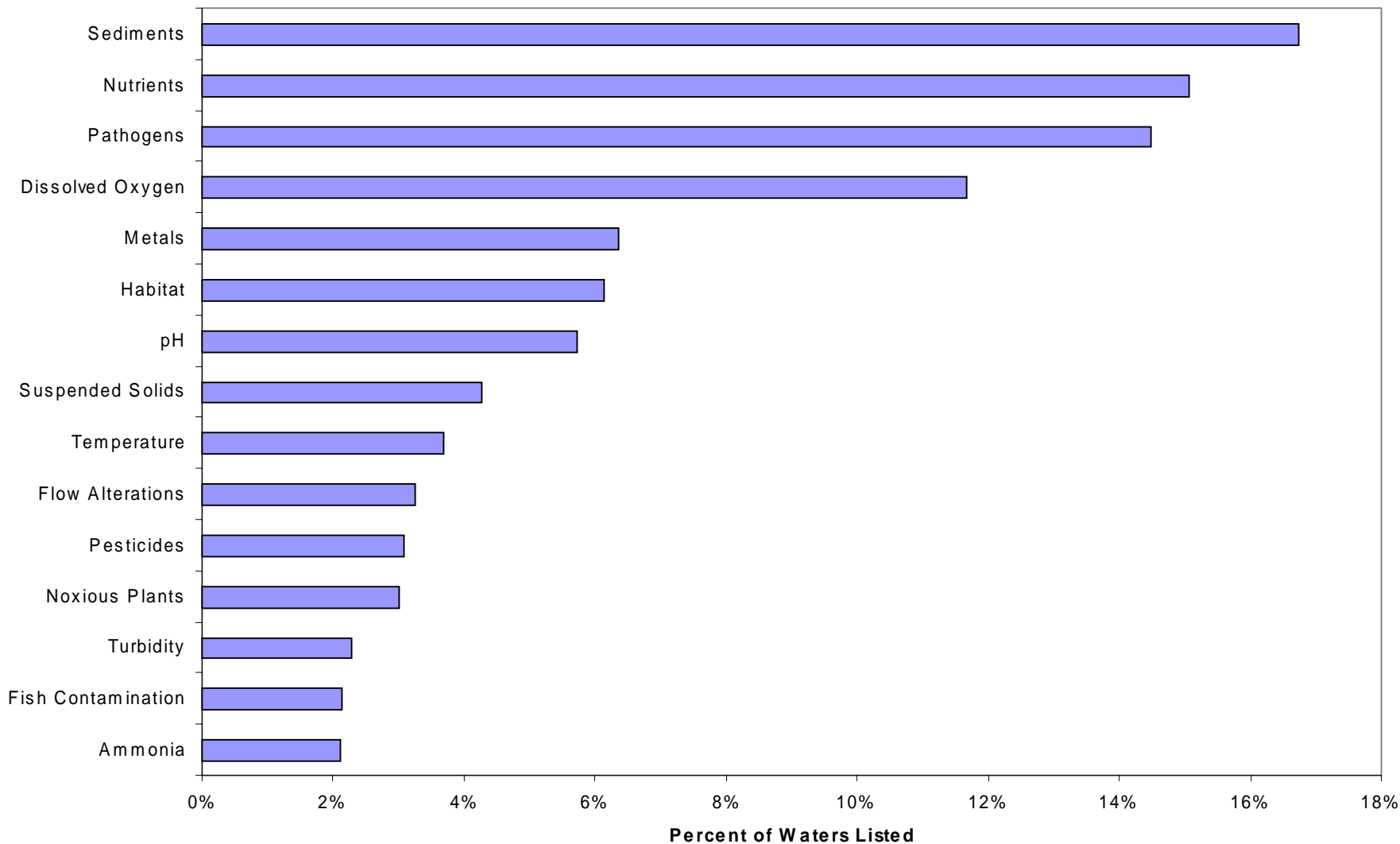
What do §303(d) lists tell us?

- 218 million Americans live within 10 miles of an impaired waterbody
- States have identified about 21,000 polluted river segments, lakes, and estuaries
 - Over 300,000 river & shore miles & 5 million lake acres
 - Excess sediments, nutrients, and harmful microorganisms are leading reasons

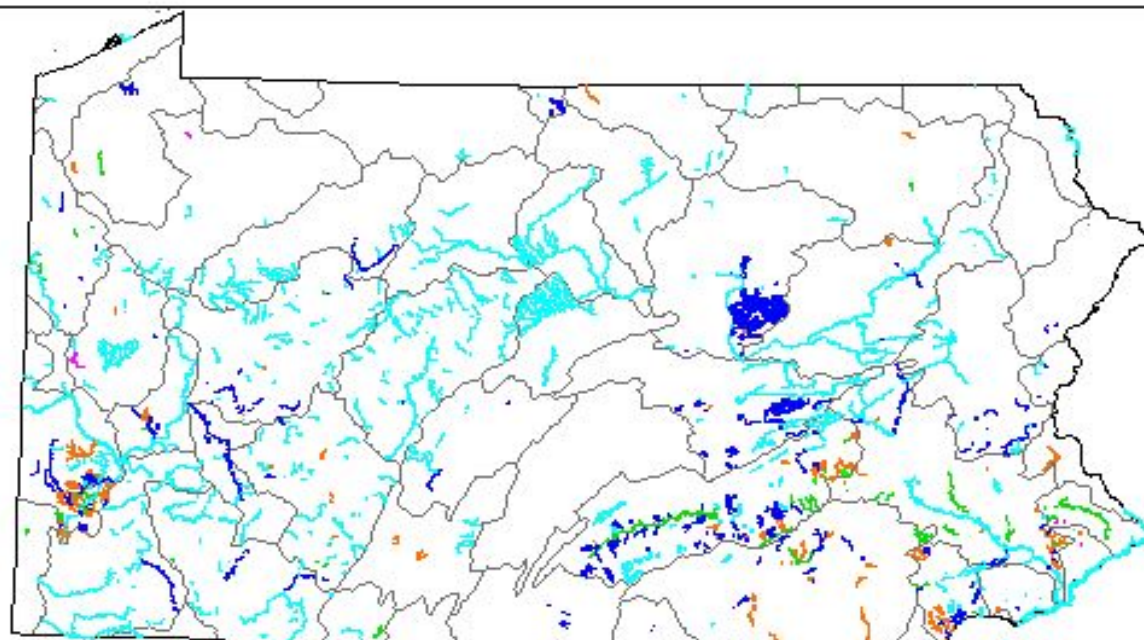
Sources of Impairment by Category from the 1998 303(d) List



Top 15 Impairments



1998
State of Pennsylvania
Waters Not Meeting
Clean Water Goals



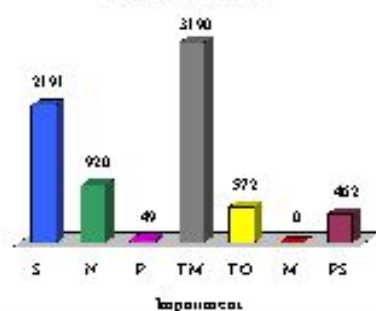
Legend:

- Sedimentation
- Nutrients
- Pathogens
- Multiple *
- Other **
- 8-digit USGS Cataloging Units

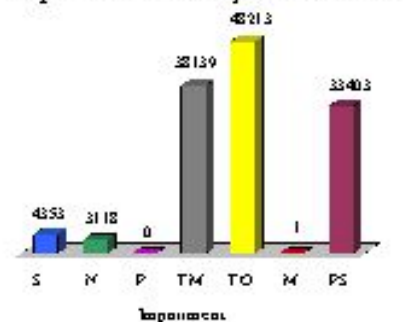
* Any combination of sediments, nutrients, and pathogens

** All other causes

Impaired Stream/River/Coastal
Shoreline Miles



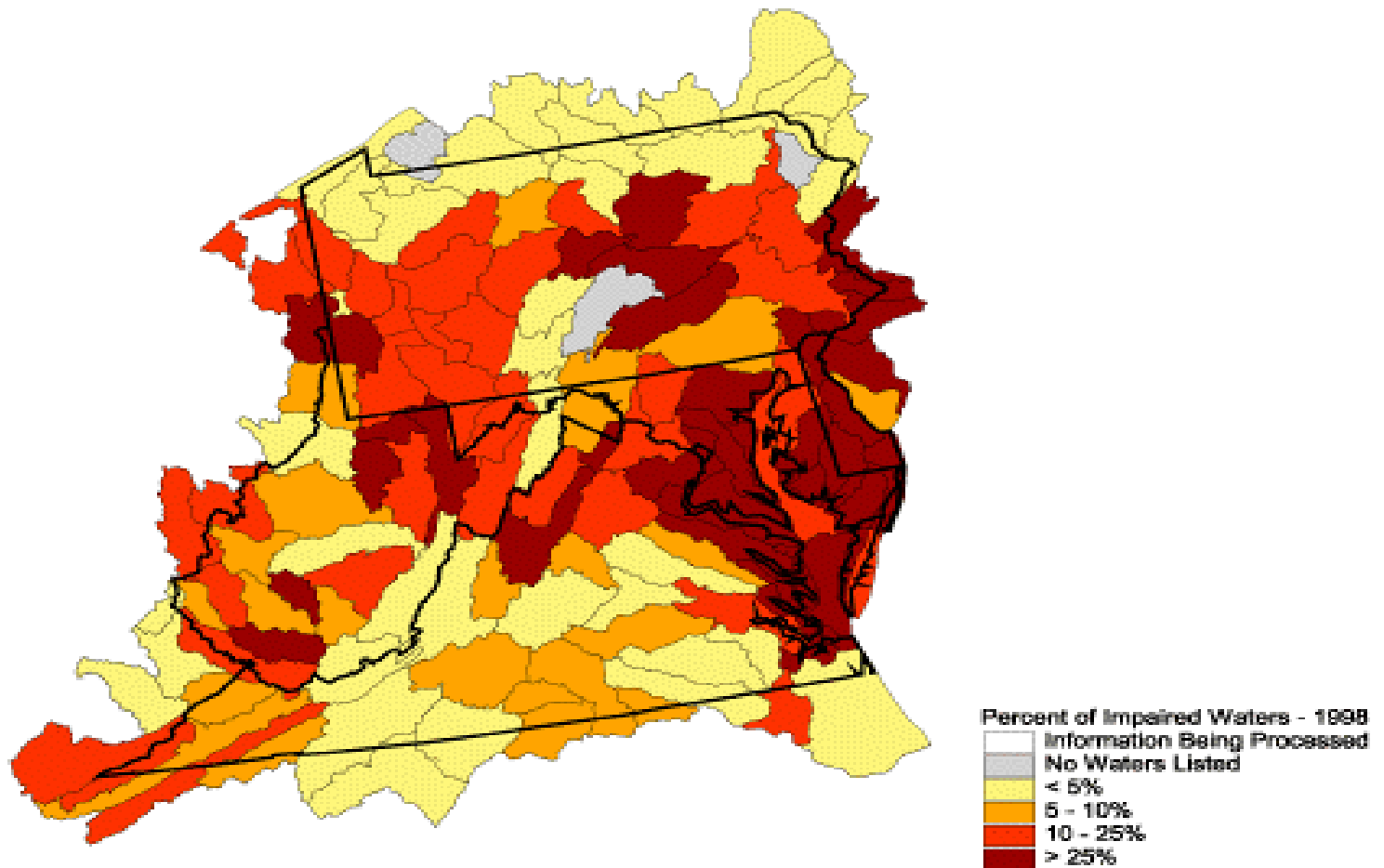
Impaired Lake/Estuary/Wetland Acres



S = Sedimentation
N = Nutrients
P = Pathogens
TM = Toxics/Metals/Inorganics
TO = Toxics/Organics
M = Mercury
PS = Pesticides



Percent of Impaired Waters



14% of Region III's Streams Require TMDLs

Total Stream Miles - 155,767

303(d) Listed Stream Miles:

DC - 39

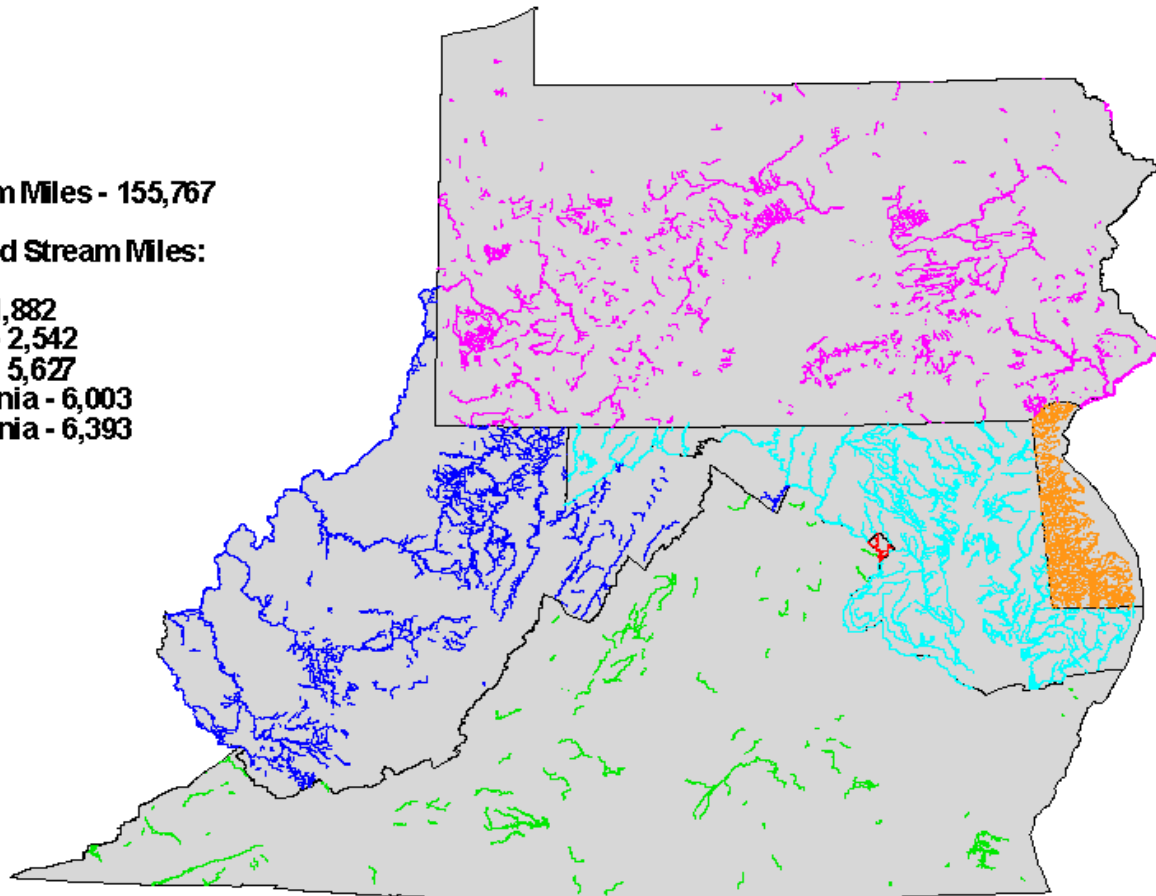
Virginia - 1,882

Delaware - 2,542

Maryland - 5,627

West Virginia - 6,003

Pennsylvania - 6,393



Source: EPA

TMDLs - The Pollutants of Concern

- PA (1039 waters)

- metals - 413 siltation - 315 nutrients - 217
 - AMD = 36% agriculture - 22% urban runoff - 9%

- WV (722 waters)

- metals - 454 pH - 305 unknown - 98
 - AMD - 69% unknown - 18% acid rain - 8%

- VA (891)

- shellfish - 290 Fecal - 179 benthic - 115
 - NPS - 44% unknown - 19% agriculture - 11%

TMDLs - The Pollutants of Concern

- MD (198)

- nutrients - 145 Sediment - 98 Fecal - 51

- NPS - 46% natural - 34% point sources- 14%

- DE (377)

- habitat - 179 nutrients - 138 pathogens - 126

- NPS - 90% Point - 8% superfund - 2%



Forest Harvesting

September 6-8, 2000

12



Construction Site

September 6-8, 2000



Improper Erosion Controls

September 6-8, 2000

14



Lack of Stream Buffers

September 6-8, 2000

Regulatory History

- 1985 -- TMDL regulations first issued
 - Provisions included nonpoint sources and load allocations
- 1992 -- TMDL regulations revised
 - Provisions called for State lists every two years
- 1999 -- Revisions to TMDL and NPDES regulations proposed

Regulatory History (cont)

- Final Rule published on July 13
- Congressional rider on military construction/supplemental appropriations prohibits EPA from implementing this rule
- TMDL program continues under 1992 regulations and agreements reached through litigation

TMDL Litigation

- 45 legal actions in 37 States and DC
- EPA under court order/consent decree to ensure TMDLs are established in many States
- Issues:
 - Lists -- adequacy, basis, underlying data
 - Pace of TMDLs -- when will they all be done
 - Backstop -- EPA guarantee to do TMDLs if a State does not

1992 Regulations

- **Scope of State lists**
 - Includes waters impaired or threatened by pollutants
 - List composed of waters needing TMDLs
 - Waters remain on the list until the TMDL is approved, or when water quality standards have been attained
- **2-year listing cycle**
 - Submitted to EPA on April 1 in every even numbered year

1992 Regulations (cont)

- Methodology used to develop list
 - States use “all existing and readily available water quality-related information”
 - Monitored and evaluated data used
 - Methodology submitted at the same time as the list
 - If EPA asks, States must provide “good cause” for not including a water on the list.

1992 Regulations (cont)

- Components of a TMDL
 - Sum of allowable loads to meet water quality standards
 - Wasteload allocations from point sources
 - Load allocations from nonpoint sources and natural background
 - Margin of safety
 - Considers seasonal variation

1992 Regulations (cont)

- **Priorities/Schedule for TMDL development**
 - List must include priority ranking based on severity of pollution and uses to be made of the water
 - Identify pollutant of concern
 - State must identify waters targeted for TMDL development within the next 2 years

1992 Regulations (cont)

- Public review
 - State calculations to establish TMDLs must be subject to public review
- EPA actions on lists and TMDLs
 - EPA has 30 days to approve/disapprove State lists, priority ranking and targeting
 - If EPA disapproves, it has 30 days to establish list or TMDL, and must seek public comment

1992 Regulations (cont)

- Interpretive guidance issued in 1997
 - States should develop schedules for establishing TMDLs, generally within 8-13 years of being listed
 - States should describe plan for implementing load allocations for nonpoint sources, including:
 - Reasonable assurances that load allocations will be achieved, using incentive-based, non-regulatory or regulatory approaches
 - Public participation process
 - Recognition of other watershed management processes and programs

EPA Objectives for the 2000 Rule

- Establish effective and flexible framework to move the country toward goal of clean water for all Americans
- Establish process for making decisions in a common sense, cost-effective way on how best to restore polluted waterbodies

Overview of 2000 Rule

- Provides for a more comprehensive list of impaired waters
- Lists would be submitted every 4 years
- Impaired waters would remain on list until water quality standards are attained
- Public would be notified and have opportunity to comment on methodology, lists and TMDLs

Overview of 2000 Rule (cont.)

- Would strengthen efforts to put in place cleanup actions that result in attaining water quality standards
- NPDES permits could be revised to be consistent with the TMDL
- Sets goal of attaining water quality standards within 10 years, if possible

Current TMDL Program

- 2000 final rule cannot be implemented
- 1992 regulations and interpretive guidance will govern the TMDL program
- Consent decrees or settlement agreements will guide TMDL development in many instances

For More Information

- TMDL homepage -
<http://www.epa.gov/owow/tmdl>
 - EPA guidance and documents
 - Status report on litigation
 - TMDL Federal Advisory Committee Report
 - Maps and information on impaired waters
 - Links to other TMDL websites, including States
 - Regulations